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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/635,862

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Michael J. DeLuca

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EXAMINER

GILES, NICHOLAS G

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/635,862	<b>Applicant(s)</b> DELUCA ET AL.	
	<b>Examiner</b> NICHOLAS G. GILES	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 and 74-83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-41 is/are allowed.
- 6) ☒ Claim(s) 74-83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claim **74** have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims **74-83** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The new limitation in claim **74** of a memory with program code embodied therein and programming a processor were not described anywhere in the specification as originally filed. Further the new limitation of analyzing a shape of a first pixel...red in color can not be found in the specification as originally filed.

Claims **75-83** depend on claim 74 and therefore are rejected.

The previous rejection follows.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims **74-81** are rejected under 35 U.S.C. 102(b) as being anticipated by Hiroshi et al. (JP05-224271).

Regarding claim **74**, Hiroshi et al. discloses:

A method of filtering a red-eye phenomenon from an acquired digital image comprising a multiplicity of pixels indicative of color, the pixels forming various shapes within the image (eyes etc.), the method comprising: (a) analyzing information describing conditions under which the image was acquired (stroboscope used or not); and (b) determining, based at least in part on said analyzing, whether one or more regions within said digital image are suspected as including red eye artifact (see abstract and ¶0010 and 0012 where when the strobe is used red-eye is suspected and subsequently checked).

Regarding claim **75**, see the rejection of claim 74 and note that Hiroshi et al. further discloses:

Analyzing pixel information within one or more regions suspected as including red eye artifact based on said analyzing of information describing conditions under which the image was acquired (abstract, using

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size and color to analyze eyes), and determining whether any of said one or more suspected regions continue to be suspected as including red eye artifact based on said pixel analysis, said pixel analysis being performed after said analyzing of information describing conditions under which the image was acquired (abstract and ¶0010 and 0012, analyzing size and color after checking if strobe is used).

Regarding claim **76**, see the rejection of claim 74 and note that Hiroshi et al. further discloses:

Analyzing pixel information within said digital image, and determining whether said one or more regions are suspected as including red eye artifact based on said pixel analysis, and wherein said pixel analysis is performed after said analyzing of information describing conditions under which the image was acquired (abstract and ¶0010 and 0012, analyzing size and color after checking if strobe is used).

Regarding claim **77**, see the rejection of claim 74 and note that Hiroshi et al. further discloses:

Obtaining anthropometrical information of human faces and said determining, based at least in part on said analyzing of information describing conditions under which the image was acquired, whether said regions are actual red eye artifact, being based further on said anthropometrical information (abstract and ¶0010 and 0012, analyzing size of red-eyes).

Regarding claim **78**, see the rejection of claim 74 and note that Hiroshi et al. further discloses:

Filtering method being executed within a portable image acquisition device, having no photographic film (abstract and ¶¶0010, 0012, and 0014, image processing device uses a CCD image of film from a camera).

Regarding claim **79**, see the rejection of claim 74 and note that Hiroshi et al. further discloses:

Filtering method is executed as a post-processing step on an external computation device (abstract and ¶¶0010, 0012, and 0014, image processing device uses a CCD image of film from a camera that formed the image).

Regarding claim **80**, see the rejection of claim 74 and note that Hiroshi et al. further discloses:

Information describing the conditions under which the image was acquired comprising an indication of whether a flash was used when the image was acquired (abstract).

Regarding claim **81**, see the rejection of claim 74 and note that Hiroshi et al. further discloses:

Determining whether said regions are actual red eye artifact is performed within a digital camera as a probability process based upon a plurality of criteria (abstract and ¶¶0010 and 0012, analyzing size and color of CCD captured image).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim **82** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroshi et al.

Regarding claim **82**, see the rejection of claim 74 and note that Hiroshi et al. further discloses:

Adjusting a pixel color within any of said regions wherein red eye artifact is determined (¶0012, changing color and luminosity).

Hiroshi et al. is silent with regards to outputting the image to a printer. Official Notice is taken that it was well known at the time the invention was made to output images to a printer. An advantage to doing so is that a person can print the image for a photo album. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Hiroshi et al. include outputting the image to a printer.

8. Claim **83** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroshi et al. in view of Matama (U.S. Patent No. 7,042,501).

Regarding claim **83**, see the rejection of claim 74 and note that Hiroshi et al. further discloses:

Determining whether said regions are actual red eye artifact being performed as a probability determination process based upon a plurality of criteria (abstract and ¶¶0010 and 0012, analyzing size and color of CCD captured image).

Hiroshi et al. is silent with regards to adjusting the pixel color within the printer. Matama discloses this in 8:39-44 and 15:13-18. As can be seen in 15:13-18 of Matama this is advantageous in that the printer can effectively perform the red eye correction processing by simple manipulation and output an image of high quality without a red eye effect in high productivity. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Hiroshi et al. adjusting the pixel color within the printer.

#### ***Allowable Subject Matter***

9. Claims **1-41** are allowed.

Regarding claim **1**, no prior art could be located that teaches or fairly suggests using the spectral response curve of the sensor as meta-data to determine if a region of an image is suspected of including red eye in combination with the rest of the limitations of the claim.

Claims **2-27, 29, and 30** depend on claim 1 and therefore are allowed.



Regarding claim **28**, no prior art could be located that teaches or fairly suggests using the aperture, f-stop, or spectral response curve of the sensor as meta-data to determine if a region of an image is suspected of including red eye in combination with the rest of the limitations of the claim.

Regarding claim **31**, this claim is allowed for similar reasons as claim 1.

Regarding claims **32-41**, these claims depend on claim 31 and therefore are allowed.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS G. GILES whose telephone number is (571)272-2824. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicholas G Giles/  
Examiner, Art Unit 2622

/Jason Chan/  
Supervisory Patent Examiner, Art Unit 2622